

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appellant: BOIES et al.

Application Serial No.: 09/628,233

Filing Date: July 28, 2000

For: SYSTEM AND METHOD FOR  
PROVIDING DECENTRALIZED E-  
COMMERCE

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)  
) Group Art Unit: 3624

)  
) Examiner: Dr. Geoffrey R. Akers

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) **APPEAL BRIEF**

)  
) IBM Docket No.: YOR920000265

)  
) Attorney Docket No.: I01.090

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**CERTIFICATE OF MAILING UNDER 37 CFR 1.8**

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Dated: 1/21/04

By: *Jill Holme*

Jill Holme

**BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Commissioner for Patents  
Washington, DC 20231

Sir:

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner in the Final Office Action mailed July 15, 2003 (the "Final Office Action"), rejecting claims 1-38 and 43-51.

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## **REAL PARTY IN INTEREST**

The present application is assigned to INTERNATIONAL BUSINESS MACHINES CORPORATION, North Castle Drive, Armonk NY 10504, U.S.A.

## **RELATED APPEALS AND INTERFERENCES**

No other appeals or interferences are known to Appellants, Appellants' legal representative, or assignee, which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

## **STATUS OF CLAIMS**

Claims 1-38, and 43-51 are pending in the application. All pending claims stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,449,601 (hereinafter "Friedland"), in view of U.S. Patent No. 6,510,434 (hereinafter "Anderson"). Claims 43-45 stand rejected under 35 U.S.C. §101 for failing to provide a concrete, useful, and tangible output.

Upon entry of the Amendment After Final Office Action filed concurrently herewith, claims 1-12, 18-19, 20-31, 37-38, 46-47, and 50-51 will be pending. For the Board's convenience, a copy of the Amendment After Final Office Action is attached hereto.

## **STATUS OF AMENDMENTS**

An Amendment After Final Office Action is being filed concurrently herewith solely to remove issues for appeal.

## SUMMARY OF INVENTION

The Internet has changed the way people shop and search for information; unfortunately, not all content providers enjoy an even playing field. Large businesses can easily set up their own Web sites and attract sufficient traffic to efficiently sell their wares or share their information. Small businesses often rely on search engines (such as Yahoo® or Google®) to help searchers locate their content. For example, a buyer seeking to purchase a used 1995 Porsche® could either go directly to a used car Website or he could conduct a search using a search engine to locate Websites including the terms "Porsche", "for sale" and "1995".

Such a search, unfortunately, will likely uncover a huge number of hits, including articles or reviews about Porsches, sellers of related merchandise, *etc.* Some of the hits may include links to sites selling Porsches; however, the search results will likely not provide information needed by the searcher, because search engines are not capable of finding or presenting the additional information. For example, the search results will likely not include vital information such as the price, model year, model type, mileage, *etc.* As a result, the buyer is forced to laboriously link to each individual Web page to locate the vital details. As discussed in the background section of the instant application, other Internet sales techniques (such as advertising on auction or classified advertisement sites) suffer from additional disadvantages. (*See, e.g.,* pages 3-6).

To solve these and other problems, embodiments of the present invention utilize the services of a "portal server" which acts as a search interface and intermediary between users and content servers. (*See, e.g.,* page 14, lines 3-5). The portal server stores information, including information identifying registered content providers, information identifying indexed content, and information identifying portal tagging standards. (*See, e.g.,* page 16, lines 9-20). Each content provider can use tags to mark certain data fields within their content. If desired, each content provider can establish and use its own tagging standard (that is, a wide variety of different or non-standardized provider tagging standards may be used). As an example, one automobile dealership selling Porsches® may tag address information in their advertisements

using the tags <address1> and <address2>, while another dealership may tag address information in their advertisements using the tags <street address> and <city, state and zip>. The two dealerships mark the same type of information, but use different tagging standards.

Pursuant to some embodiments, these different tagging standards are cross-referenced or correlated to a central portal tagging standard. (*See, e.g.*, page 29, line 16 – page 30, line 10). For example, the central portal tagging standard may define the tags <address\_street1>, <address\_street2>, and <address\_city\_state\_zip>. In the example introduced above, the portal server acts to cross-reference the central portal tags with the two different provider tagging standards used by the two auto dealerships. In this manner, a buyer can submit a search request to the central portal server, and the portal server will be able to accurately identify, retrieve and present address information from the two automobile dealerships despite the use of two different provider tagging standards.

When a user performs a search using the portal Website, the cross-reference is used to locate content associated with different content providers, even though the different content providers use different tagging standards. The portal is able to perform detailed and specific searches of non-standardized, decentralized content supplied by one or more content providers and stored remotely on one or more content servers. (*See, e.g.*, page 12, lines 1-4). Further, content providers retain the flexibility to tag content based on their own needs and using their preferred tagging scheme. Portal servers are able to create standards and respond to changing conditions and provide detailed and accurate responses to search requests. (*See, e.g.*, page 12, lines 27-21).

## **ISSUES**

Whether claims 1-12, 18-19, 20-31, 37-38, 46-47, and 50-51 are patentable under 35 USC §103 over Friedland in view of Anderson.

## **GROUPING OF CLAIMS**

Appellants group the pending claims as follows:

Group I – claims 1-12, 20-31, and 47;

Group II – claims 18-19, 37-38, 46 and 50;

Group III – claim 51.

Appellants believe that claims in different groups are separately patentable, as explained in the following section.

## **ARGUMENT**

As will be explained, the rejections of each of the claims are improper because: (a) the cited combination fails to teach or suggest embodiments of the claimed invention, and/or (b) because the Examiner has improperly combined references (in particular, there is no adequate reasoning or support for making the proposed combinations). Therefore, Appellants respectfully request that the Examiner's rejections be reversed.

### ***I. The Claims of Group I are Allowable Over the Cited References***

Claims 1-12, 20-31 and 43 stand rejected under 35 USC §103(a) as unpatentable over Friedland (U.S. Patent No. 6,449,601) in view of Anderson (U.S. Patent No. 6,510,434).

Claim 1 is directed to a method of decentralized e-commerce which includes receiving a search request to search content stored on at least one content server. The content includes provider tags and the search request includes at least one search term associated with at least one portal tag, the portal tag being part of a portal tagging standard. The method includes identifying a provider tag corresponding to the portal tag using a cross-reference of portal tags corresponding to provider tags. The search term is compared to a content field tagged with a provider tag corresponding to the portal tag associated with the search term. That is, the method of claim 1 allows a user to search content that is tagged with a different tagging scheme, thereby allowing content providers to allow their content to be searched without the need to adopt a common or standardized tagging scheme.

As described in his Abstract, Friedland describes a "distributed live auction" and a "method for distributing a live auction over the Internet to remote bidders". Friedland describes "the distribution of real-time, live auctions, conducted by a live auctioneer in the presence of an audience of bidders, to remote bidders via the Internet" (Col. 2, line 66 to Col. 3, line 2). In general, Friedland describes the operation of an auction server to conduct Internet auctions.

Anderson describes a system for retrieving "information from a database using an index of XML (eXtensible Markup Language) tags and metafiles." (*See, e.g.,* the Abstract). In general, Anderson describes a hierarchical tagging structure allowing information stored in a database to be easily searched. The tagging structure includes different types of tags used to identify information in the database (including "domain" or "category" tags). In general, Anderson describes a single tagging structure used to facilitate searching of a database of information.

As will be discussed in more detail below, Appellants respectfully assert that the rejections of claims 1-12, 20-31 and 43 are improper at least because: (a) the cited combination fails to teach or suggest embodiments of the claimed invention, and/or (b) because the Examiner has improperly combined references (in particular, there is no adequate reasoning or support for making the proposed combinations). Therefore, Appellants respectfully request that the Examiner's rejections be reversed and/or that all claims be allowed.

***(a) The References Cited by the Examiner Fail (Alone or in any Combination) Fail to Teach or Suggest Embodiments of Group I***

35 U.S.C. § 103 authorizes a rejection where, to meet a claim, it is necessary to modify a single reference or to combine it with one or more other references. (*See, e.g.,* MPEP § 706.02(j)). All claim limitations must be considered (that is, the invention as a whole must be compared to the references). (*See, e.g.,* MPEP § 2141.02).

Appellants respectfully assert that Friedland and Anderson, alone or in any combination, fail to teach or suggest embodiments of the present invention as recited in claim 1, at least because both Friedland and Anderson, taken as a whole, fail to teach or suggest a method of decentralized e-commerce including either (1) the use of both portal tags and provider tags, (2) identifying a provider tag corresponding to a portal tag using a cross-reference of portal tags

corresponding to provider tags, or (3) comparing a search term with a content field flagged with a provider tag corresponding to the portal tag associated with the item.

Embodiments of the present invention allow a user to search for information provided by a wide variety of different content providers who each may use different provider tagging schemes. For example, when a user performs a search using a portal, the cross-reference is used to locate content associated with different content providers, even though the different content providers use different tagging standards. The portal is able to perform detailed and specific searches of non-standardized, decentralized content supplied by one or more content providers and stored remotely on one or more content servers. (*See, e.g.,* page 12, lines 1-4). Further, content providers retain the flexibility to tag content based on their own needs and using their preferred tagging scheme.

The Examiner, apparently, agrees that Friedland lacks these features, and has not alleged that Friedland provides them. The Examiner's reliance on Friedland is remarkable in that the Examiner's rejection does not refer to any feature of claim 1. Instead, the Examiner cites Friedland for its teaching of auction techniques, stating:

"As per claims 1-51 Friedland teaches a method of decentralized e-commerce (Abstract) comprising conducting auctions over the Internet (Fig 4) for the sale of merchandise (Fig 7/710/716) and offering the user the opportunity to purchase the merchandise (Fig 7/726) for auction (Fig 6/622/606). Friedland also describes the merchandise by price (Fig 8/808) as well as a means offered to the user to purchase the merchandise (Fig 8/818) as well as rejecting the bids that do not meet a minimum bid threshold (Fig 8/806)." (Final Office Action, page 2, paragraph 6).

The Examiner ignores the language of the claims of the present application. Claim 1 does not recite a method of conducting auctions over the Internet. Instead, as addressed in each of Appellant's prior responses, embodiments relate to a method of decentralized e-commerce that allows a user to search content. Friedland does not teach or suggest the use of any "provider tags", any "portal tags", any "cross-reference of portal tags corresponding to provider tags" or any searching which compares "a search term with a content field tagged with a provider tag

corresponding to the portal tag associated with the search term". As such, Friedland fails to teach or suggest embodiments of the present invention as recited in claim 1.

The Anderson reference fails to make up for these deficiencies of Friedland. In his rejection, the Examiner states that Anderson teaches:

"(col 2 lines 36-col 3 line 43) wherein the portal tagging standard requires tags (col 8 line 65-col 9 line 64) for domains and categories (Fig 6A)(Fig 5) which may include name, address, education, experience and job classification (Abstract)(Fig 3A)(Fig 3B)(Fig 4B) (as well as providing a link to the matching content (Fig 5)(Fig 8)(col 2 line 36-col 3 line 39). Anderson also relates providers for parts and items associated each provider with an item (Fig 2)(col 8 lines 28-64) as well as conducting search queries using tags (Fig 6C) and sending search requests to servers (Fig 7) and parsing search requests from clients to identify terms (Fig 8) as well as delivering search requests to clients." (Final Office Action, pages 2-3, paragraph 6).

The Examiner again ignores the language of the claims. In particular, the Examiner cites a reference that describes the use of a single tagging standard, and ignores the claim language that recites the use of multiple tagging standards (including portal tags and provider tags) and cross-references between the standards. Appellants are not claiming to have invented the use of a single tagging standard, or the mere ability to search a database using tags. Instead, Appellants have developed a new and useful system that cross-references a tagging scheme used by content providers (the "provider tags") with "portal tags" that are "part of a portal tagging standard", thereby allowing content providers to continue using their own tagging schemes while providing users with improved searching capabilities. There is simply no teaching or suggestion in Anderson to provide such a system or method.

More particularly, like Friedman, there is simply no teaching or suggestion in Anderson to provide a system or method including (1) the use of both portal tags and provider tags, (2) identifying a provider tag corresponding to a portal tag using a cross-reference of portal tags corresponding to provider tags, or (3) comparing a search term with a content field flagged with a provider tag corresponding to the portal tag associated with the item. It appears that the



Examiner agrees that Anderson lacks these features because the Examiner has not addressed any of these limitations in his rejections.

Instead, Anderson describes a system in which a database of information is tagged using a single tagging standard, allowing ready searching of the database. Each record of the database includes an index component which lists the domain tags and category tags that are associated with each record. (Col. 4, lines 44-46). The "domain tags" and "category tags" are tags within the same tagging scheme. This is discussed, for example, at col. 7, lines 18- 68, where Anderson describes category tags as "groups of terms" and domain tags as corresponding to a line of business in a classified advertising directory. Further evidence that Anderson's system is adapted for use with a single tagging scheme is provided at Col. 9, lines 14-17 where Anderson discusses an implementation using XML, stating: "XML could be used to create a universal search vocabulary using a common set of XML tags so that an IR system can access information located in any database that uses the common set of XML tags."

That is, all of the information in Anderson's database is tagged using different types of tags in the same tagging standard. A system that uses a single tagging scheme is not the same as the claimed system, which includes both "provider tags" and "portal tags". As an example to illustrate this fundamental distinction: Anderson's system would likely work very well for searching a database in which all the content was tagged using the same tagging scheme (*e.g.*, where all of the data records were tagged using Anderson's domain and category tags). However, unlike embodiments of the present invention, Anderson's system would not work if different content providers (each using their own tagging scheme) tagged the content in the database. Using Anderson's restaurant database example (*See, e.g.*, col. 10, lines 24-51), Anderson's system could not search content if it was not tagged using Anderson's "restaurant domain tag (<Restaurant\_tag>)". Information from a restaurant that used it's own tagging scheme would simply not be found in a search using the Anderson system.

Further, at least because only a single tagging scheme is used by Anderson, there is simply no teaching or suggestion in Anderson to provide any "cross-reference" between two

different tagging schemes (*i.e.*, there is no identifying a provider tag corresponding to a portal tag using a cross-reference of portal tags corresponding to provider tags as recited in claim 1).

Finally, at least because Anderson fails to teach or suggest the use of different tagging schemes, there is simply no teaching or suggestion of performing a search by comparing a search term with a content field flagged with a provider tag corresponding to the portal tag associated with the item. Instead, Anderson performs searches by comparing terms of a search request to XML tags that match the search terms. Matching information is returned as search results. Embodiments of the present invention as recited in claim 1 requires additional processing to identify a provider tag corresponding to the portal tag associated with the item identified in the search request. With this additional processing, embodiments allow the identification of content even if the content was tagged using a different tagging scheme (*i.e.*, using a provider tag). There is simply no teaching or suggestion in Anderson to provide such a feature.

Accordingly, claim 1 is believed patentable at least because Friedland and Anderson (alone or in combination and taken as a whole) fail to teach or suggest a method of decentralized e-commerce including either (1) the use of both portal tags and provider tags, (2) identifying a provider tag corresponding to a portal tag using a cross-reference of portal tags corresponding to provider tags, or (3) comparing a search term with a content field flagged with a provider tag corresponding to the portal tag associated with the item. Appellants respectfully request that the Examiner's rejections be overturned.

***(b) The Examiner's Combination of References is Improper***

Even if the references cited by the Examiner did teach or suggest features of the claimed invention (which Appellants respectfully assert they do not), Appellants respectfully assert that the Examiner has not properly established that the claims are obvious over the cited references.

To properly establish a case of obviousness over a combination of references, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify

the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

As will be explained, however, there is absolutely no motivation in the prior art to modify or combine these references as proposed by the Examiner (let alone any indication of a "reasonable expectation of success").

Neither Friedland nor Anderson provides any suggestion whatsoever that these references should be combined. Instead, according to the Examiner, "it would have been obvious to one skilled in the art at the time of the invention to combine Friedland in view of Anderson to teach the invention. The motivation to combine is to teach a system for providing improved searching for matching items as applied to e-commerce as enunciated by Anderson (col 2 lines 25-34)." (*See, e.g.*, Final Office Action at page 3, paragraph 6).

Appellants respectfully do not understand this reasoning. It appears that the Examiner believes that the combination is proper simply because both references are associated with searching. Such general statements about the broad field of the invention (*i.e.*, information searching and retrieval) fall far short of a motivation to combine these particular references in a way that would make the particular invention recited in claim 1 obvious. Similarly, the statement that "functions" can be "modified" is not "a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references" as required for a *prima facie* case of obviousness. *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

Further, even if the two references could potentially be combined, the resulting system would still lack elements of the claimed invention. As discussed above, both Friedland and Anderson fail to teach or suggest several elements of claim 1 (including the use of provider tags and portal tags, cross-referencing the two sets of tags, and searching in a content field tagged with a provider tag corresponding to a portal tag associated with the search term). The asserted combination fails to describe a system having any or all of these features, and the Examiner has not provided any motivation to modify either of the references to provide them.

In view of the above, claim 1 is patentable under 35 USC § 103 over Friedland and Anderson, and Appellants respectfully request that the Examiner's rejection be reversed and/or the claims allowed. The other claims in Group I (*i.e.*, independent claims 20 and 47 and dependent claims 2-12 and 21-31) contain limitations similar to those described above with respect to claim 1 and are patentable for the reasons described above.

## ***II. The Claims of Group II are Allowable Over the Cited References***

Claims 18-19, 37-38, 46 and 50 stand rejected under 35 USC §103(a) as unpatentable over Friedland (U.S. Patent No. 6,449,601) in view of Anderson (U.S. Patent No. 6,510,434). As a preliminary matter, the claims of Group II should not stand or fall with the other Groups herein at least because these claims recite one or more elements (*i.e.*, registering the content with a portal server comprising providing an address for the content and providing key information relating a provider tag to a corresponding portal tag in a portal tagging standard) that are not found in any other Group.

Claim 18 is directed to a "method of decentralized e-commerce" which includes "creating content wherein the content is tagged with at least one provider tag to identify each of at least one content field", "storing the content on a content server", and "registering the content with a portal server". The registering of the content with a portal server is recited to include "providing

an address for the content" and "providing key information relating a provider tag to a corresponding portal tag in a portal tagging standard".

It is respectfully noted that the references relied upon by the Examiner, whether taken alone or in combination (and taken as a whole), do not teach or suggest the feature of registering the content with a portal server comprising providing an address for the content and providing key information relating a provider tag to a corresponding portal tag in a portal tagging standard. As discussed above in conjunction with the discussion of Group I, there is simply no teaching or suggestion in either reference to provide any information relating a provider tag to a portal tag. As such, there is certainly no teaching or suggestion to provide an address for the content as well as providing key information relating the provider tag to a corresponding portal tag. Further, the Examiner has not pointed to any alleged teaching in either reference suggesting such a feature, nor has the Examiner provided any alleged motivation to modify the references to provide such a feature.

In view of the above, claim 18 is patentable under 35 USC § 103 over Friedland and Anderson, and Appellants respectfully request that the Examiner's rejection be reversed and/or the claims allowed. The other claims in Group II (*i.e.*, independent claims 37, 46 and 50 and dependent claims 19 and 38) contain limitations similar to those described above with respect to claim 18 and are patentable for the reasons described above.

### ***III. The Claim of Group III is Allowable Over the Cited References***

Claim 51 stands rejected under 35 USC §103(a) as unpatentable over Friedland (U.S. Patent No. 6,449,601) in view of Anderson (U.S. Patent No. 6,510,434).

As a preliminary matter, the claim of Group III should not stand or fall with the other Groups herein at least because the claim recites an element (*i.e.*, a first database for storing at least one portal tagging standard having portal tags and a second database for storing at least one registered content provider information) that is not found in any other Group.

Claim 51 is generally directed to a "system for decentralized e-commerce" including "a first database for storing at least one portal tagging standard having portal tags" and "a second database for storing at least one registered content provider information, including key information and an address to content". The address includes "a network location address to content having provider tags identifying each of at least one content field within the content" and the key information includes "a cross-reference of portal tags corresponding to provider tags".

The system of claim 51 further includes "a central processing unit configured" to perform the following functions: "receive a user search request having at least one search term associated with at least one portal tag", "cross-reference each portal tag with at least one corresponding provider tag using the key information" and "search the content by comparing each search term with each matching content field", where a matching content field is "a content field tagged with a provider tag corresponding to the portal tag associated with the search term."

Appellants respectfully submit that the references relied upon by the Examiner, taken either alone or in combination (and taken as a whole), fail to teach or suggest several features of claim 51. For example, there is nothing in those references regarding a database that stores at least one portal tagging standard having portal tags (nor has the Examiner alleged any such teaching). The references also lack any disclosure in regard to a database storing key information that includes a cross-reference of portal tags corresponding to provider tags. Further, the references fail to disclose a CPU configured to cross-reference each portal tag with at least one corresponding provider tag. Claim 51 is further believed patentable for the reasons discussed above in conjunction with the claims of Group I.

In view of the above, claim 51 is patentable under 35 USC § 103 over Friedland and Anderson, and Appellants respectfully request that the Examiner's rejection be reversed and/or the claim allowed.

## CONCLUSION

The rejections of claims 1-12, 18-19, 20-31, 37-38, 46-47, and 50-51 are improper at least because the Examiner has failed to cite references which teach or suggest each of the elements of the claims and further because the Examiner has improperly combined references (*i.e.*, there is no adequate reasoning or support for making the proposed combinations). Therefore, Appellants respectfully request that the Examiner's rejections be reversed.

As required by 37 CFR §1.192(a), this Brief is filed within two months from the date of receipt of Appellants Notice of Appeal (*i.e.*, within two months of November 24, 2003), as such, no extension of time is believed due. However, if any additional fees are due in conjunction with this matter, the Commissioner is hereby authorized to charge them to Deposit Account 50-0510. An Appendix of claims involved in this appeal is attached hereto.

If any issues remain, or if the Examiner or the Board has any further suggestions for expediting allowance of the present application, kindly contact the undersigned using the information provided below.

Respectfully submitted,



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Attachments: (1) Appendix of claims  
(2) Copy of Amendment After Final Office Action filed 1/20/2004

## APPENDIX

1. A method of decentralized e-commerce, comprising:
  - receiving a search request from a user to search content stored on at least one content server, wherein the content includes provider tags identifying each of at least one content field within the content, and wherein the search request includes at least one search term associated with at least one portal tag, the portal tag being part of a portal tagging standard and identifying a type of data within content to be searched;
  - identifying the provider tag corresponding to the portal tag using a cross-reference of portal tags corresponding to provider tags; and
  - comparing the search term with a content field tagged with a provider tag corresponding to the portal tag associated with the search term.
2. The method of claim 1, further comprising generating a summary of content matching the search request.
3. The method of claim 2, further comprising transmitting the summary to the user.
4. The method of claim 3, wherein the summary includes a link to the matching content.
5. The method of claim 1, wherein the content is for the sale of merchandise.
6. The method of claim 5, wherein the portal tagging standard requires tags for identifying merchandise name, description and price.
7. The method of claim 6, further comprising:
  - offering the user the option to purchase the merchandise;
  - receiving a request to purchase the merchandise from a user; and
  - transmitting the request to purchase to the provider of the content.



8. The method of claim 1, wherein the content provider's content is for merchandise to auction.
9. The method of claim 8, wherein the portal tagging standard requires tags for identifying merchandise name, description and minimum bid.
10. The method of claim 9, further comprising managing an auction, wherein managing the auction comprises:
  - receiving bids from users;
  - identifying a winning bidder; and
  - notifying the provider of the content of the identified winning bidder.
11. The method of claim 1, wherein the provider's content is a resume.
12. The method of claim 11, wherein the portal tagging standard requires tags for identifying name, address, education, experience and job classification.

Claims 13-17 (cancelled)

18. A method of decentralized e-commerce, comprising:
  - creating content wherein the content is tagged with at least one provider tag to identify each of at least one content field;
  - storing the content on a content server; and
  - registering the content with a portal server, comprising providing an address for the content and providing key information relating a provider tag to a corresponding portal tag in a portal tagging standard.
19. The method of claim 18, further comprising transmitting the content to the portal server.
20. A system of decentralized e-commerce, comprising:

means for receiving a search request from a user to search content stored on at least one content server, wherein the content includes provider tags identifying each of at least one content field within the content, and wherein the search request includes at least one search term associated with at least one portal tag, the portal tag being part of a portal tagging standard and identifying a type of data within content to be searched;

means for identifying the provider tag corresponding to the portal tag using a cross-reference of portal tags corresponding to provider tags; and

means for comparing the search term with a content field tagged with a provider tag corresponding to the portal tag associated with the search term.

21. The system of claim 20, further comprising means for generating a summary of content matching the search request.

22. The system of claim 21, further comprising means for transmitting the summary to the user.

23. The system of claim 22, wherein the summary includes a link to the matching content.

24. The system of claim 20, wherein the content is for the sale of merchandise.

25. The system of claim 24, wherein the portal tagging standard requires tags for identifying merchandise name, description and price.

26. The system of claim 25, further comprising:

means for offering the user the option to purchase the merchandise;

means for receiving a request to purchase the merchandise from a user; and

means for transmitting the request to purchase to the provider of the content.

27. The system of claim 20, wherein the content provider's content is for merchandise to auction.

28. The system of claim 27, wherein the portal tagging standard requires tags for identifying merchandise name, description and minimum bid.

29. The system of claim 28, further comprising means for managing an auction, wherein means for managing the auction comprises:

means for receiving bids from users;

means for identifying a winning bidder; and

means for notifying the provider of the content of the identified winning bidder.

30. The system of claim 20, wherein the provider's content is a resume.

31. The system of claim 30, wherein the portal tagging standard requires tags for identifying name, address, education, experience and job classification.

Claims 32-36 (cancelled)

37. A system of decentralized e-commerce, comprising:

means for creating content wherein the content is tagged with at least one provider tag to identify each of at least one content field;

means for storing the content on a content server; and

means for registering the content with a portal server, comprising providing an address for the content and providing key information relating a provider tag to a corresponding portal tag in a portal tagging standard.

38. The method of claim 37, further comprising transmitting the content to the portal server.

39-45. (Cancelled)

46. An article of manufacture, comprising:

a computer usable medium having computer readable program code means embodied therein for decentralized e-commerce, comprising:

computer readable program code means for causing a computer to create content wherein the content is tagged with at least one provider tag to identify each of at least one content field;

computer readable program code means for causing a computer to store the content on a content server; and

computer readable program code means for causing a computer to register the content with a portal server, comprising providing an address for the content and providing key information relating a provider tag to a corresponding portal tag in a portal tagging standard.

47. A programmed computer for decentralized e-commerce, comprising:

a memory for storing computer executable code; and

a processor for executing the program code stored in memory, wherein the program code includes:

code to receive a search request from a user to search content stored on at least one content server, wherein the content includes provider tags identifying each of at least one content field within the content, and wherein the search request includes at least one search term associated with at least one portal tag, the portal tag being part of a portal tagging standard and identifying a type of data within content to be searched;

code to identify the provider tag corresponding to the portal tag using a cross-reference of portal tags corresponding to provider tags; and

code to compare the search term with a content field tagged with a provider tag corresponding to the portal tag associated with the search term.

48-49. (Cancelled)

50. A programmed computer for decentralized e-commerce, comprising:

a memory for storing computer executable code; and

a processor for executing the program code stored in memory, wherein the program code includes:

code to create content wherein the content is tagged with at least one provider tag to identify each of at least one content field;

code to store the content on a content server; and

code to register the content with a portal server, comprising providing an address for the content and providing key information relating a provider tag to a corresponding portal tag in a portal tagging standard.

51. A system for decentralized e-commerce, comprising:

- a first database for storing at least one portal tagging standard having portal tags; and
- a second database for storing at least one registered content provider information, including key information and an address to content, wherein the address comprises a network location address to content having provider tags identifying each of at least one content field within the content, and the key information comprises a cross-reference of portal tags corresponding to provider tags; and

- a central processing unit configured to:

- receive a user search request having at least one search term associated with at least one portal tag;

- cross-reference each portal tag with at least one corresponding provider tag using the key information; and

- search the content by comparing each search term with each matching content field, a matching content field being a content field tagged with a provider tag corresponding to the portal tag associated with the search term.